

### **IN THE SPECIFICATION**

Further to the Preliminary Amendment filed April 19, 2004, please amend the specification as follows:

Please amend the fourth full paragraph at page 73, lines 22 to 27, as follows:

Introducing acidic amino acid residues where basic residues are present in the hCG beta-subunit monomer sequence is also contemplated. In this embodiment, the variable "X" corresponds to an acidic amino acid. The introduction of these amino acids serves to alter the electrostatic character of the L1 hairpin loops to a more negative state. Examples of such amino acid substitutions include one or more of the following K2Z, [[K6Z]] R6Z, [[K8Z]] R8Z, [[K107Z]] R10Z, and K20Z, wherein "Z" is an acidic amino acid residue.

Please amend the third full paragraph at page 74, lines 19 to 23, as follows:

In another aspect of this embodiment, neutral or acidic amino acid residues in the hCG  $\beta$  subunit, L3 hairpin loop are mutated. The resulting mutated subunits contain at least one mutation in the amino acid sequence of SEQ ID NO: 3 at the following amino acid positions: N58B, Y59B, D61B, V62B, F64B, E65B, S66B, I67B, L69B, P70B, G71B, P73B, G75B, V76B, N77B, P78B, [[G79B]] V79B, V80B, S81B, Y82B, A83B, V84B, A85B, L86B, and S87B. "B" is a basic amino acid.

Please amend the fourth full paragraph at page 74, lines 24 to 28, as follows::

The invention further contemplates introducing one or more acidic residues into the amino acid sequence of the hCG beta-subunit L3 hairpin loop. For example, one or more acidic amino acids can be introduced in the sequence described above, wherein the variable "X"

corresponds to an acidic amino acid. Specific examples of such mutations R60Z, R63Z, R68Z, and [[R73Z]] R74Z, wherein “Z” is an acidic amino acid residue.